

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

CELLULAR COMMUNICATIONS)
EQUIPMENT LLC,)
Plaintiff,) Case No. 2:15-cv-0576-RWS-RSP
) (Lead Case)
v.)
AT&T, INC., ET AL.,) JURY TRIAL DEMANDED
Defendants.)
)
)

PLAINTIFF'S REPLY CLAIM CONSTRUCTION BRIEF

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<u>Exhibit</u>	<u>Description</u>
Exhibit J	Declaration of Jay P. Kesan (“Kesan Decl.”)

I. INTRODUCTION

Defendants seek a finding of indefiniteness on 19 terms across the six asserted patents. But, a party seeking to invalidate a patent must overcome a presumption that the patent is valid. *See* 35 U.S.C. § 282; *United States Gypsum Co. v. National Gypsum Co.*, 74 F.3d 1209, 1212 (Fed. Cir. 1996). This presumption places the burden on Defendants to prove the patent's invalidity by clear and convincing evidence. *Microsoft Corp. v. I4I Ltd. Partn.*, 564 U.S. 91, 97 (2011). Close questions of indefiniteness "are properly resolved in favor of the patentee." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1348 (Fed. Cir. 2005). Defendants have failed to meet this burden for any claim term alleged to be indefinite. Accordingly, Defendants' assertions of indefiniteness should be rejected, and Plaintiff's constructions should be adopted.

II. DISPUTED TERMS AND PHRASES

A. "radio network resources"

Defendants fail to explain why "radio network resources" needs to be construed. The term is easily understood by a person of ordinary skill in the art by its plain and ordinary meaning. *See Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) ("[U]nless compelled to do otherwise, a court will give a claim term the full range of its ordinary meaning as understood by an artisan of ordinary skill."). The patentee did not act as its own lexicographer for this term, nor did the patentee disavow the full scope of the claim term either in the specification or during prosecution. *See GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) ("[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal."). Accordingly, Defendants' attempt to limit this term to less than the full scope of its ordinary meaning is improper and should be rejected.

B. "subtracting . . ."

Defendants fail to establish that the "subtracting" limitation is indefinite because, although

they cite to *Nautilus* in support of their position, they ignore one of the central holdings of that case: “in assessing definiteness, claims are to be read in light of the patent's specification and prosecution history.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2128 (2014). Defendants ignore the explicit references in the specification and the prosecution history that both define the calculation of power headroom and tie that calculation directly to the recitation of the “subtracting” limitation in the claims. *See* Dkt. No. 253 at 8-9. But consideration of the entire record leaves no doubt as to the meaning of this limitation. *See* Kesan Decl. ¶¶ 26-29. Accordingly, Defendants’ position is both legally and factually flawed, and should be rejected.

Defendants’ argument that the claim allows different possibilities for calculating power headroom is only plausible if the specification and prosecution history are ignored. The patentee defined one way of calculating power headroom, and that calculation is indisputable: “power control headroom is the difference between the nominal maximum transmission power and the power at the UE, e.g. the power that the UE would use if it did not apply maximum power limitations.” ’957 patent at 4:16-19. CCE neither “rewrites” nor “rearranges” the claim terms. The identification and order of terms is indisputable:

loss estimates, and closed-loop power corrections). Example: The right part of the min-function requests a transmission power of 26 dBm. P_{max} is set to 23 dBm. The reported power headroom is 23 dBm-26 dBm=-3 dB.

Subtracting from P_{max} the Power at UE = Power Headroom

Id. at 3:32-35 (annotated); *see also* ’957 patent FH, 06/20/2013 Resp. to OA at 12-13; *see also* Kesan Decl. ¶¶ 26-30. CCE’s proposed construction is correct and should be adopted.

C. “when applicable”

Defendants attempt to create uncertainty where there is none. Indeed, Defendants apply meaning to the term “when applicable” that accords with the plain and ordinary meaning of the

term and provides a definitive scope to the claim limitation. Defendants agree that “applicable” has an ordinary meaning—i.e., “relevant” or “appropriate”—and that “when applicable” would be understood as “under certain circumstances.” This meaning that Defendants apply is consistent with the claim limitation and with CCE’s position that this limitation does not require construction. Further, it is consistent with Defendants’ alternatively proposed construction that comports with that plain meaning—i.e., that the allocation of additional resources is “appropriate” only under the “circumstances” that additional resources are available. *See* Kesan Decl. ¶¶ 32-35.

D. '957 Patent Claims 7-9

Defendants once again attempt to manufacture an ambiguity in the claim language where there is none. The use of the term “the apparatus” in claims 7-9 has a meaning that is reasonably ascertainable to a person of ordinary skill in the art. *See* Kesan Decl. ¶¶ 38-40. Defendants mischaracterize claims 7-9 as mixing method and apparatus elements and misapply the law governing such claims here. Claim 7 recites a method, one of the steps of which is “determining a power headroom report.” '957 patent at 9:53. The claim then defines the calculation for “determining the power headroom report.” *Id.* at 9:60-65. One of the terms of that calculation is “the power that the apparatus would use if it did not apply maximum power limitations.” *Id.* The “apparatus” does not result in improper mixing of apparatus claim elements with the method claims. Rather, it specifies a measurement performed at the apparatus that is utilized in the calculation—i.e. the measurement used is “the power that the apparatus would use if it did not apply maximum power limitations.” '957 patent at 9:62-63; *see also* Kesan Decl. ¶¶ 38-40.

Method claims inherently involve the use of and operate on physical objects, such as the claimed “apparatus.” Indeed, the statutory definition of the term “process” confirms as much: the term “process” is defined to mean “process, art or method, and includes a new use of a known process, *machine*, manufacture, composition of matter, or material.” 35 U.S.C. § 100(b) (emphasis

added). Thus, “the power that the apparatus would use” refers to the apparatus used to implement the claimed method. It introduces no ambiguity. And claim 8 limits the structure of the apparatus used to perform the method to a “user equipment.” Recitation of physical structures in which the method is practiced is allowable, and indeed, a manner of common practice. *See Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1374 (Fed. Cir. 2008)

Defendants’ application of *IPXL Holdings* to claims 7-9 is inapposite. The conclusion of *IPXL Holdings* resulted from the lack of clarity as to when the mixed subject matter claim would be infringed. *See IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005) (“[I]t is unclear whether infringement of claim 25 occurs when one creates a system that allows the user to [practice the claimed method step], or whether infringement occurs when the user actually [practices the method step].”). There is no similar ambiguity in claims 7-9 of the ’957 patent. Direct infringement of claims 7-9 is clearly limited to *practicing* the claimed method by an apparatus such as a user equipment. *See Microprocessor Enhancement*, 520 F.3d at 1374–75. Further, each of the cases cited by Defendants involved an apparatus claim that also recited improper method steps that must be performed for the claim to be infringed. *See IPXL Holdings*, 430 F.3d at 1384; *see also E-Watch Inc. v. Apple, Inc.*, No. 2:13-cv-1061, 2015 WL 1387947 at *6 (E.D. Tex. Mar. 25, 2015). Here, the claims are method claims that merely recite physical structures in which the method is practiced. Defendants’ cited authority does not apply.

E. “one or more of the predetermined subframes”

There is no reasonable debate as to the meaning of this claim limitation, and CCE’s proposed construction reflects that meaning. CCE’s construction does not broaden the term, as Defendants’ suggest. It merely applies the intended meaning of the patentee. *See* Kesan Decl. ¶¶ 42–46. Defendants improperly inject additional limitations into the claim that do not exist under the plain meaning. Specifically, the claim requires “excluding one or more of the predetermined

subframes.” There is no explicit or implied requirement that there be “multiple (i.e., two or more) predetermined subframes from which one or more subframes are selected for exclusion” within the claim. Defendants’ argument improperly imposes this additional, unrecited, requirement and it should be rejected. The *only* requirement of the disputed limitation is that one or more predetermined subframes are excluded. Thus, the scope of this term is unchanged by CCE’s proposed construction—“excluding one or more predetermined subframes.”

Defendants also fail to establish that the prosecution history suggests a different interpretation of the claims. Indeed, Defendants ignore the sequence of amendments that led to the error in the issued claims, including the fact that the limitation was originally presented without the error. *See* Dkt. No. 253 at 11-12; Kesan Decl. ¶¶ 43-45. Defendants disregard these important facts, and fail to offer any alternative interpretation of the claim limitation that is supported by the prosecution history. Accordingly, CCE’s interpretation is correct and should be adopted.

F. “establish(ing) channel information” / “the channel information”

Defendants fail to prove by clear and convincing evidence that these claim limitations are indefinite. Defendants’ argument consists of a single conclusory statement: “If, as CCE argues, the ‘channel information’ established/provided and sent in reply to the request for aperiodic channel information is not ‘aperiodic,’ then the claims are ambiguous and indefinite.” Dkt. No. 265 at 13. But it provides no reason why this construction would render these claims indefinite. Nor does Dr. Singer provide any support for the indefiniteness of these claims. *See* Kesan Decl. ¶ 54. Dr. Singer’s opinion focuses only on construing “the channel information” as “the aperiodic channel information.” *See* Dkt. No. 265, Singer Decl. ¶¶ 75-79. Because Defendants offer no supporting evidence, Defendants’ assertion that these claims are indefinite fails.

The terms “the channel information” and “establish(ing) channel information” do not require further construction. *See* Kesan Decl. ¶¶ 49-53. Defendants’ construction inserts an

unnecessary restriction on these limitations that is not present in the claims as written. Defendants have not justified restricting the full scope of the claim language. *See GE Lighting Solutions*, 750 F.3d at 1309 (“[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal.”). Accordingly, the Court should reject Defendants’ indefiniteness argument and apply the plain and ordinary meaning to these limitations.

G. “... for which the aperiodic channel information is provided”

Defendants’ allege that this term is indefinite on the basis that “[w]here ‘claims are susceptible to only one reasonable interpretation and that interpretation results in a nonsensical construction of the claim as a whole, the claim must be invalidated.’” Dkt. No. 265 at 14 (citing *Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004)). But Defendants’ interpretation, requiring the base station to both request and provide the same channel information, is neither the only interpretation of this limitation, nor is it a *reasonable* interpretation. Instead, the only reasonable interpretation is that the request for providing aperiodic channel information is sent on a component carrier as identification of the component carrier for which the request pertains (i.e., is to be provided). *See* Kesan Decl. ¶¶ 56-58. This interpretation is consistent with the plain meaning and is reflected in CCE’s proposed construction—“on a component carrier for which the aperiodic channel information is to be provided.” This correct interpretation is made abundantly clear by the specification, which Defendants ignore entirely. *See, e.g.*, ’472 patent at 5:22-33, 10:11-13; *see also* Kesan Decl. ¶¶ 56-59.

Further, Defendants are correct to identify that the claims were originally presented during prosecution with the language proposed by CCE—“is to be provided.” However, Defendants are wrong to surmise that the patentee intentionally amended the claims to “is provided” to achieve a different meaning—especially, if that meaning is nonsensical, as Defendants’ contend. Whether the amendment was error or not, is not evident. But, nevertheless, the language is sufficient to

communicate the intended meaning and provide a definite scope to a person of ordinary skill in the art. *See Kesan Decl.* ¶¶ 56-58. If the Court determines that a construction is necessary, it should be construed consistent with the specification as “on a component carrier for which the aperiodic channel information is to be provided.” *Id.*

H. Claim Limitations Alleged To Be Governed by 35 U.S.C. § 112 ¶ 6.

Because none of the disputed claim limitations use the term “means,” Defendants bear the burden of presenting evidence to overcome the presumption that 35 U.S.C. § 112 ¶6 does not apply. *See Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003). Defendants have not shown that any limitation, as understood by one of ordinary skill in the art, demonstrates that the claim term fails to recite sufficiently definite structure or else recites a function without reciting sufficient structure for performing that function. *Id.* at 1373.

Further, Defendants’ analysis is legally flawed in numerous respects. First, Defendants’ rely on an incorrect test for determining whether § 112 ¶6 applies—namely, whether “processor configured to,” for example, has simply been used as a substitute for “means for.” Dkt No. 265 at 21. Indeed, none of the cases that Defendants cite in support of this test establish this as a proper test. *See Apex*, 325 F.3d at 1373; *Lighting World Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1360 (Fed. Cir. 2004)¹; *Smartflash LLC v. Apple Inc.*, 77 F. Supp. 3d 535, 540 (E.D. Tex. 2014).² Rather, the proper inquiry is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure. *Williamson v.*

¹ Note that the relevant holding of *Lighting World* has been overruled by *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc).

² Notably, none of these cases found that § 112 ¶6 applied to the claim limitations-at-issue. *See Apex*, 325 F.3d at 1373 (finding that “first/second interface circuit” limitations are not means-plus-function limitations); *Lighting World*, 382 F.3d at 1363 (finding that “connector assembly” limitation was not a means-plus-function limitation); *Smartflash*, 77 F. Supp. 3d at 542 (finding that § 112, ¶ 6 did not apply to the “processor” limitations).

Citrix Online, LLC, 792 F.3d 1339, 1349 (Fed. Cir. 2015). Under this test, each of the “processor,” “memory including software,” and “redundancy version signaling module” limitations, when considered with their associated claim language, communicate sufficient structure and are not §112 ¶ 6 limitations. Kesan Decl. ¶¶ 62-65, 74-78, 85-88.

Second, Defendants commit legal error in considering only the terms “process configured to” and “module”—instead of the entire claim limitation—in determining whether § 112 ¶6 applies, as is evident from its erroneous test focusing only on the substitution of singular words. *See Apex*, 325 F.3d at 1372 (finding that the district court’s primary source of error was in its “reliance on single words of the limitations, e.g., ‘circuit,’ as opposed to the limitations as a whole”).

And third, Defendants’ analysis applies an overly strict standard to the determination of sufficient structure in the claims, by requiring the claims, themselves, to recite an algorithm for implementing the recited functions. *See, e.g.*, Dkt. No. 265 at 23 (“Here, the “processor configured” terms fail to recite sufficient structure because no algorithm is recited in the claims to perform the recited functions.”); *see also id.* at 18, 21, 24. Under Defendants’ purported test, any apparatus claimed in a functional manner would fall under § 112 ¶6 if it did not recite an algorithm in the claim, regardless of any structure recited in the claim. Defendants cite no legal authority in support of the overly demanding standard. And, indeed, there is none.

Defendants’ analysis underlying its conclusion that these “processor” limitations should be governed by § 112 ¶6 is also factually deficient. For example, in applying its erroneous test requiring substitution of the term “processor configured to” with “means for,” Defendants provide a chart comparing excerpts of the specification to the claim limitations for allegedly show that such a substitution can be made. *See* Dkt. No. 265 at 22. But each of Defendants’ cited excerpts specifically pertains to a “sixth aspect of several embodiments of the invention” (*see, e.g.*, ’472

patent at 11:3-12:3) that is **disclosed separately** from the “first aspect of several embodiments of the invention” (*see, e.g.*, ’472 patent at 6:63-8:3) which recites the use of a “processor” for the same functions. The claims at issue are clearly supported by the “first aspect” disclosure. Defendants’ disregard of the relevant portions of the specifications that describe the use of a processor is evidence of the weakness in their argument. *See also* ’472 patent at 3:64-4:3, 4:24-31. If anything, the specification **distinguishes** the claiming of a “processor” as the name for a definite structure from the more generic use of “means for” that is also described by the specification.

Defendants incorrectly characterize the “processor,” “memory including software . . . with at least one processor,” and “redundancy version signaling modules” as “generic computer components” or a “general purpose computers.” *See e.g.*, Dkt. No. 265 at 27. But that approach is incorrect and inconsistent with the description of these inventions. The recited elements are instead components of radio network equipment, such as either a UE or an eNode-B. Such components are not generic computers. And the components utilized within those structures are not generic computer components. *See* Kesan Decl. ¶¶ 62, 74-75, 85-88. Thus, Defendants’ position that such terms are general purpose computers and thereby require disclosure of an algorithm to provide sufficient structure is unsupported and should be rejected. The specialized nature of the recited components, and the manner in which they would be implemented in a UE or eNode-B would be recognized by a person of ordinary skill in the art. *Id.* Defendants’ conclusions of indefiniteness improperly rely on this assertion of generic computer components in the claims.

Corresponding Structures

If necessary, a corresponding structure to the “processor” recited by the claims of the ’472 and ’262 patent, is identified as either the UE processor 112 (for claims 1 and 10 of the ’472 patent) or the eNode-B processor 122 (for claims 15, 25, 27 of the ’472 patent and claims 1, 10, 13 of the

'262 patent) and equivalents. *See* Kesan Decl. ¶¶ 66-67, 70. To the extent it is necessary to identify an algorithm for the recited functions, the algorithm for “determine the selected downlink component carrier . . .” is described in the '472 patent at 5:22-33 and for “establish channel information with respect to the selected downlink component carrier” at 3:56-61 and 5:8-11. *See* Kesan Decl. ¶¶ 68-69. The algorithm for the “generating a request” and “including the request” limitations is described in the '472 patent at 3:4-14 and 5:16-21 and in the '262 patent at 3:8-19 and 5:12-17. *See* Kesan Decl. ¶ 71.

If necessary, a corresponding structure to the “memory including software . . . configured, with the at least one processor” limitation is identified as a combination of the discrete components in a user equipment that include a memory having software instructions and at least one processor for implementing the recited functions. *See* '676 patent at 5:56-6:3; Kesan Decl. ¶ 79. To the extent it is necessary, an algorithm for “determine that a set of at least one triggering criterion is met” is disclosed in both the claims and the specification. *See* '676 patent, claims 19, 21, 23-26; *id.* at 4:35-5:5; Kesan Decl. ¶¶ 80-81. The algorithm for “provide a power control headroom report in an uplink from user equipment, in response to the set having been met” is described in the '676 patent at 5:28-35. Kesan Decl. ¶ 82.

If necessary, a corresponding structure to the “redundancy version signaling module” is a system combining one or more processors (including DSPs, ASICs, FPGAs, etc.), memory, and software, as would be found in either a UE or an eNode-B. *See* '022 patent at 13:63-15:54, Figures 11, 12; Kesan Decl. ¶¶ 86-89. The algorithm for the function “detect start of a system information message transmission window and to assign a redundancy version sequence at the start of the transmission window” is described within claim 6 the '022 patent itself and in the specification of the '022 patent at 7:8-9:46 and Figures 2-5. *See* Kesan Decl. ¶ 90.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on this 11th day of October, 2016. As of this date all counsel of record have consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A).

/s/ Terry A. Saad